Washington and adjacent areas. The author is to be congratulated on having kept the book more or less up to date, and the publisher on having produced an attractive, handy volume.—G. NEVILLE JONES, *University of Illinois, Urbana, Illinois.*

FERN MATERIAL USED IN RESEARCH ON MORPHOGENESIS AND PHOTOPERIODISM.—For thirty years and more ferns have provided material for important research in fundamental problems of differentiation of tissues and organs. Leading work has been carried on in England by Wardlaw and his students and by Wetmore and his aides at Harvard. In a recent paper[1] DeMaggio and Wetmore reported successful excision and culture on nutrient media of young embryos of *Todea barbara*, an Australian member of the *Osmunda* family. When embryos that had become spherical, 5-7 days after fertilization of the egg, are used the embryo could be carried to independent growth, with a root-stem-leaf system, on the medium. With one-celled embryos, however, multicellular structures would be produced, but they were without tissue organization and resembled prothallia.

Another pair of experimenters[2] report the effects of exposure to red light on early stages of the prothallia of *Onoclea sensibilis*. Like most fern spores, those of *Onoclea* require light to germinate. When germinated spores are then placed in darkness, growth is in the form of a slender filament. Brief exposure to red light will increase the rate of growth (elongation) of these filaments to about the 12th day. Thereafter, the elongation rate is reduced by exposure to red light.—RALPH C. BENEDICT, *Pilot Knob, New York.*

JOE, BARBARA. Species of Dryopteris Cultivated in California. Baileya **11**(4): 117–130. Illus. 1963.—Provides a key, brief descriptions and good photographs of each of eight taxa.

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[1]DeMaggio, A. E. and R. H. Wetmore. Growth of Fern Embryos in Sterile Culture. Nature **191** (4783): 94-95. 1961.

[2]Miller, John H., and D. R. Wright. An Age-Dependent Change in the Response of Fern Gametophytes to Red Light. Science **134** (3490): 1629. (Nov. 17) 1961.

WAGNER, W. H., JR. Pteridophytes of the Mountain Lake area, Giles County, Virginia, Including Notes from Whitetop Mountain. Castanea **28**(4): 113–150. Illus. 1963.—A check list with copious notes on geographic distribution, ecology, and cytotaxonomy of the ferns and fern allies studied.

Notes and News

HARRY W. TRUDELL was born in Richmond, Virginia, May 2, 1879, but came to Philadelphia as a youth. Becoming an accountant, he was employed for many years by a large leather firm, and rose to the important position of Secretary. A nature enthusiast, he spent all available time outdoors, collecting both botanical and mineralogical specimens. He also took an active part in such organizations as the Philadelphia Botanical Club, which he served as treasurer for many years, and the Philadelphia and Pennsylvania Mineralogical Societies.

Friendly in manner and having a fine sense of humor, he was an ideal companion on field trips, and joined the writer on many searches for ferns. He was a member of the American Fern Society for 45 years. A hybrid between the Lobed and Mountain Spleenworts, which we found on the cliffs of the Susquehanna River in Lancaster County, Pa., was named *Asplenium trudellii* Wherry in his honor (Amer. Fern Jour. **15**: 49. *Pl. 4, figs. 4-5.* 1925).

He enjoyed superior health for 80 years, then was stricken with Parkinson's disease, and after gradually failing, passed away on January 26, 1964.

His collections of ferns and other plants have been placed in the herbarium of the Academy of Natural Sciences of Philadelphia and other similar institutions.—EDGAR T. WHERRY, *University of Pennsylvania, Philadelphia.*

EXPERIENCES IN RAISING FERNS FROM SPORES.—Two or three years ago I decided to try raising some ferns from spores, being stimulated by Mrs. Kay Boydston's article in the Fern Journal[1]

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[1]Boydston, Kathryn. An Amateur Plants Fern Spores. Amer. Fern Jour. **48**: 1–18. 1958.